**Best Available Copy** 

## SPECIFICATION:

5

10

15

Applicant submits that this specification Amendment after Final Rejection only addresses formal matters raised in a previous Office Action. Accordingly, Applicant is entitled to entry of this Amendment as a matter of right under 37 C.F.R. §1.116 (b)(1).

Page 3, last paragraph, please replace with the following new paragraph:

The operation of the device is with a solenoid, or other motive force driving the reciprocating rod axially. The reciprocating rod is slideably mounted within the housing, transiting through the solenoid coil. The reciprocating rod is held in place by springs, affixed to the reciprocating rod to limit travel and to return the reciprocating rod to the neutral position between impacts. On activation, the reciprocating rod is accelerated axially by the solenoid or other motive force. Mounted on the extended end of the reciprocating rod is one of a variety of impact heads. An impact head is used to impact the patient's body. The shape of the impact head is determined by the treatment required. When the solenoid is reactivated, the reciprocating rod is again accelerated toward the patient's body. A typical rate of impact is twelve impacts per second. Both the speed and the force of impact are adjustable to provide optimal therapeutic effects. In a preferred embodiment, there are two impact heads attached to a forked or parallel pair of

20 reciprocating rods.

Title: Impact Head Assembly for Percussive Therapeutic Device

2

Page 4, first paragraph, please replace with the following new paragraph:

In the preferred embodiment the The impact head, which can be made of a pliable materials such as plastic, rubber, or silicone rubber, is attached by a two stage process. First, the reciprocating rod, which is preferably tubular, is inserted into an annular slot in the impact head approximately equidistant from a center bore of the impact head and the outer most edge of the impact head. The outer shape of the impact head is not limited to any one embodiment. The contact end of the impact head which is what comes in contact with the patient can be round, flat, coned or any other shape applicable in the task. The reciprocating rod can be forked like that of Fig. 1 so more than one impact head may be attached at the same time. Although, Fig. 1 shows only coned shaped impact heads, any shaped impact heads may be attached.

15 Page 4, third paragraph, please replace with following new paragraph:

Secondly, in the preferred embodiment, a central insert, which may be made of plastic that is rigid to semi-rigid in nature, is placed into the center bore of the impact head. The central insert is a rigid or semi-rigid material of a generally rod shape that permits some lateral movement of the impact head, but limits axial travel and prevents excessive creep or displacement of the impact head when in use. The central insert may be threaded or ribbed to further secure the central insert into the center bore. Further benefits of the invention include

Title:

20

5

10

Impact Head Assembly for Percussive Therapeutic Device

3

Attorney: Carl D. Crowell, No. 43 558

the central insert's limiting compression of the center bore, further securing the reciprocating rod to the annular slot.

Page 4, fourth paragraph, please replace with following new paragraph:

5

10

Improvement over the prior art is found in the stability of the connection of the impact head to the reciprocating rod. The impact head grips both the inside and the outside of the reciprocating rod with the annular slot insertion. In the preferred embodiment, when the central insert is placed in the central bore, this provides added rigidity, serves as an anvil, and prevents excessive lateral displacement in side loading. The central insert is also in position to provide improved transmission of force by providing an rigid linear anvil element, reducing the force absorption of any elastic material used to form the impact head. The central insert also helps prevent the impact head from dislodging on side or lateral loading. The added lateral stability however, will not impact the case of replacing the impact head when needed. The user can simply pull the impact head off the reciprocating rod and reinstall a different shaped impact head depending on what the treatment requires.

15

20

Title: Impact Head Assembly for Percussive Therapeutic Device

## **Best Available Copy**

Page 5, Paragraph in the beginning of the BRIEF DESCRIPTION OF THE DRAWINGS section starting on line 6, please replace with following new paragraph:

FIG. 1 is plan view of a <u>forked</u> reciprocating rod with impact head assembly of a percussive adjusting tool in accordance with a preferred embodiment of the present invention;

Page 5, Paragraph in the BRIEF DESCRIPTION OF THE DRAWINGS section starting on line 9, please replace with following new paragraph:

FIG. 2 is a plan view of an alternate embodiment a reciprocating rod with an alternate embodiment of the impact head of the invention;

Page 6, 2<sup>nd</sup> full paragraph starting on line 12, please replace with the following new paragraph:

FIG. 2 is a side elevation view of an alternate impact head embodiment attached to of the invention using a straight[[,]] or hon-forked reciprocating rod.

20

5

10

15

Title: Impact Head Assembly for Percussive Therapeutic Device **Best Available Copy** 

5

10

Page 7, second paragraph starting on line 6, please replace with the following new paragraph:

Fig. 5 is an exploded view of the impact head 10 to the first reciprocating rod 15 attachment and second impact head 12 to second reciprocating rod 16 attachment of the preferred embodiment of the present invention. The central insert 20 is inserted into the impact head central bore 26 at the attachment end 13 of the impact head 10. Similarly, the central insert 30 is inserted into the second impact head central bore 36 at the second attachment end 19 of the second impact head 12. The reciprocating rod insertion end 28 of the first reciprocating rod 15 is inserted into the annular slot 24 preferably with a twisting motion. Similarly, the second reciprocating rod 16 is inserted into the second annular slot 34 preferably with a twisting motion.

Title: Impact Head Assembly for Percussive Therapeutic Device